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_	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	10/810,481	03/26/2004	George G. Mueller	C1104-7082.21	9785	
	37462 7590 09/17/2004		EXAMINER			
	LOWRIE, LANDO & ANASTASI RIVERFRONT OFFICE			PHILOGENE, HAISSA		
		TREET, ELEVENTH FL	OOR	ART UNIT	PAPER NUMBER	
	CAMBRIDGE			2828		

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

on

		Application No.	Applicant(s)	<u> </u>			
		10/810,481	MUELLER ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Haissa Philogene	2828				
Period fo	The MAILING DATE of this communication app or Renly	pears on the cover sheet with the c	correspondence address				
A SH THE I - Exter after - If the - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period ver to reply within the set or extended period for reply will, by statute teply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	mely filed  /s will be considered timely. In the mailing date of this communication. ID (35 U.S.C. & 133).				
Status							
1) 🖂	Responsive to communication(s) filed on 26 M	larch 2004.					
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.					
3)	Since this application is in condition for alloware	nce except for formal matters, pro	osecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Dispositi	on of Claims						
4)⊠	Claim(s) 1-105 is/are pending in the application	n.					
	4a) Of the above claim(s) is/are withdraw						
5)⊠	Claim(s) 105 is/are allowed.						
	Claim(s) <u>1-3,6,10-13,15,19,20,22,26,27,29,33-</u>						
	Claim(s) <u>4,5,7-9,14,16-18,21,23-25,28,30-32,8</u>		e objected to.				
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	on Papers						
9) 🗌 :	The specification is objected to by the Examine	r.					
10)🛛	The drawing(s) filed on <u>26 March 2004</u> is/are:	a)⊠ accepted or b)□ objected t	o by the Examiner.				
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) 🔲	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority u	nder 35 U.S.C. § 119						
12) 🔲	Acknowledgment is made of a claim for foreign  ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
	1. Certified copies of the priority documents	s have been received.					
	2. Certified copies of the priority documents	s have been received in Applicati	on No				
	3. Copies of the certified copies of the prior		ed in this National Stage				
	application from the International Bureau						
* 8	see the attached detailed Office action for a list	of the certified copies not receive	∌d.				
Attachment							
1) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary					
3) Notice	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		ate Patent Application (PTO-152)				
Paper	No(s)/Mail Date	6) Other:					

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#### **DETAILED ACTION**

## Claim Objections

Claims 30-32 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The steps related to the addressed network signal were already recited in claims 16-18 and both sets of claims are identical and dependent on dependent claim 12.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33--76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 33, 46, 56 and 68, the term "essentially white" is indefinite since the overall perceivable color is variable, i.e. can be other than white and the specification does not contain guidelines or examples considered sufficient to an artisan to draw a line between white and other colors.

The remaining claims 34-45, 47-55, 57-67, 69-76 are rejected by virtue of their dependencies on the above dependent claims.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6, 10-13, 15, 19, 20, 22, 26, 27, 29, 33, 46, 48, 56, 68, 77-79, 84, 93-95 and 97 are rejected under 35 U.S.C. 102(b) as being anticipated by Cochran et al., Patent No. 5,365,084.

As per claims 1 and 10, Cochran discloses in Figs.1 and 9 an illumination apparatus B and method comprising a first number of first light sources (116) adapted to generate first radiation having a first spectrum (red) and a second number of second light sources (118) adapted to generate second radiation having a second spectrum (amber) (see Col.10, lines 41-47, 54-56), wherein the first number and the second number are capable of being different (see Col.11, lines 28-29).

As per claims 2, 11, 12, 48 and 84, Cochran discloses at least one controller (24') coupled to the first number of first light sources (116) and the second number of second light sources (118) and configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation (see Col.5, lines 53-56) so as to inherently controllably vary at least an overall perceivable color of visible radiation generated by the illumination apparatus with selected wavelength quanta in the visible spectrum. Further, Cochran discloses any combination of the LEDs of red and amber spectra (see Col.10, lines 54-61) readable as mixing at least a portion

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of the first radiation (red spectrum) and a portion of the second radiation (amber spectrum).

As per claims 3 and 13, Cochran discloses in Fig.12 the controller (24") being configured to generate a first control signal to all first light source (202) and a second signal to all second light sources (200).

As per claims 6 and 15, Cochran discloses each light source of the first and second light sources (116, 118 or 202, 200) being an LED.

As per claims 33, 56, 46 and 68, Cochran discloses the claimed invention substantially as explained above. The recited limitation "an overall perceivable color of visible radiation generated by the apparatus is essentially white" is inherent since the colored LEDs when combined can generate any color including white depending on their selected wavelengths.

As per claims 19, 20, 22, 26, 27, 29, 77-79, 93-95 and 97, Cochran discloses the claimed invention as explained above.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 34-38, 47, 51, 57-60, 69, 72, 80-83, 96 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cochran in view of Ruskouski, Patent No. 5,655,830.

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As per claims 34, 57 and 80, Cochran discloses the claimed invention substantially as explained above. Cochran does not disclose at least one power connection coupled to the at least one controller and configured to engage mechanically and electrically with a conventional light socket. Ruskouski discloses an illumination apparatus having at least one power connection via mounting base (20) coupled to the at least one controller (34) and configured to engage mechanically and electrically with a conventional light socket (see Col.4, lines 42-44 and Col.8, lines 4-12 and 33-37 and 42-44). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the power connection as taught by Ruskouski into the Cochran type apparatus, because it would ensure a readily and economically fabricated lighting device with a long life in operation, thereby improving the efficacy of the apparatus.

As per claims 35, 58 and 81, Cochran in view of Ruskouski discloses the claimed invention substantially as explained above. Further, Ruskouski discloses in Fig.4 the at least one power connection (20) being an Edison screw-type power connection.

As per claims 36, 37, 59, 60, 82 and 83, Cochran in view of Ruskouski discloses the claimed invention substantially as explained above. Further, Ruskouski discloses in Figs.4, 9 and 10 a housing (138) for first and second light sources (146) and the controller (34 or 134), wherein said housing is configured to resemble at least one type of conventional light bulb or an Edison-mount light bulb housing (22).

As per claims 47, 51, 69, 72, 96 and 100, Cochran in view of Ruskouski discloses the claimed invention substantially as explained above. Further, Ruskouski

discloses in Fig.10 the first and second light sources (146) being mounted in a PCB (144) and enclosed as a package inside the housing (138) to engage mechanically and electrically the conventional light socket via mounting base (156); and said controller (34 or 134) communication at least one control signal thereinbetween.

As per claim 38, Cochran in view of Ruskouski discloses the claimed invention substantially as explained above. In addition, Cochran discloses at least one controller (24') configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation (see Col.5, lines 53-56) so as to inherently controllably vary at least an overall perceivable color of visible radiation generated by the illumination apparatus with selected wavelength quanta in the visible spectrum.

#### Allowable Subject Matter

Claim 105 is allowed.

Claims 39-45, 49, 50, 52-55, 61-67, 70, 71 and 73-76 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 4, 5, 7-9, 14, 16-18, 21, 23-25, 28, 30-32, 85-92, 96, 98, 99 and 101-104 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chevalier et al., Patent No. FR 2 586 844.

Haissa Philogene

Haissa Filliogen.

Primary Examiner

Marka U. 2871 6

#### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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